

# AR OHIL AND GAS CONSERVATION COMMISSION

REMARKS WELL LOG ELECTRIC LOGS FILE **X** WATER SANDS LOCATION INSPECTED SUB REPORT 444

DATE FILED **4-27-92**

LAND FEE & PATENTED **X** STATE LEASE NO PUBLIC LEASE NO INDIAN

DRILLING APPROVED **6-23-92 (CAUSE NO. 139-42)**

SPUDED IN

COMPLETED PUT TO PRODUCTION

INITIAL PRODUCTION

GRAVITY API

GOR

PRODUCING ZONES

TOTAL DEPTH

WELL ELEVATION **94**

DATE ABANDONED

FIELD **BLUEBELL**

UNIT

COUNTY **DUCHESNE**

WELL NO **MISS "A" 2-15A1** API NO. **43-013-31360**

LOCATION **1473' FNL** FT FROM NE CORNER **1115' FWL** SW NW 14 14 SEC **15**

TRIP	DATE	SEC	OPERATION	TRIP	DATE	SEC	OPERATION
1S	1W	15	BADGER OIL CORPORATION				

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

(Other instructions on  
reverse side)

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		1. Lease Designation and Serial No.	
DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		FEE/FEE	
b. Type of Well Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone <input checked="" type="checkbox"/>		6. If Indian, Allottee or Tribe Name	
2. Name of Operator		7. Unit Agreement Name	
Badger Oil Corporation		14-20-H62-3860	
3. Address of Operator		8. Firm or Lease Name	
C/O Applied Drilling Services, Inc. Rt. 3 Box 3010		Miss "A"	
Roosevelt, Utah 84066		9. Well No.	
4. Location of Well (Report location clearly and in accordance with any State requirements.)		2-15A1	
At surface		10. Field and Pool, or Wildcat	
1,473' FNL 1,115' FWL <del>NW 1/4</del> SWNW		Bluebell <del>Alt 5</del>	
At proposed prod. zone		11. Sec., T., R., M., or Bk. and Survey or Area	
same		Section 15, T1S, R1W	
14. Distance in miles and direction from nearest town or post office		12. County or Parrish	
Approximately 8 miles Northeast of Roosevelt, Utah		Duchesne, Utah	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)		13. State	
1,116' FWL		Utah	
16. No. of acres in lease		17. No. of acres assigned to this well	
640		640	
18. Distance from proposed location to nearest well, drilling, completed, or applied for, on this lease, ft.		19. Proposed depth	
2,223		11,450 <del>NOTE</del>	
20. Rotary or cable tools		21. Elevations (Show whether DP, RT, GR, etc.)	
Rotary		5,707' Ungraded Ground	
22. Approx. date work will start		7/15/92	
23. PROPOSED CASING AND CEMENTING PROGRAM			
Size of Hole	Size of Casing	Weight per Foot	Setting Depth
30"	20"		150'
13.5"	10.75"	40.5#/ft	2,900'
9.75"	7.625"	29.4/26.7/33.7	11,450'
		Quantity of Cement	
		Cement to Surface (RM)	
		900 sk g	
		495 sk H & Lite	

This well is to be drilled to total depth using fresh water and fresh gel mud weighted with barite, as required. Operator will use 10" - 5000# psi BOP system and will operationally check system daily. A spacing variance is requested and is further detailed in the cover letter and supporting documents.

### TECHNICAL REVIEW

Engr. *[Signature]* 6-23-92  
Geol. *[Signature]* 6/27/92  
Surface *[Signature]* 6/19/92

RECEIVED

DIVISION OF

OIL, GAS, AND MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Applied Drilling Services, Inc. 4/24/92  
Agent for Badger Oil Corp. Date

Signed

Title

(This space for Federal or State office use)

Permit No.

Approval Date

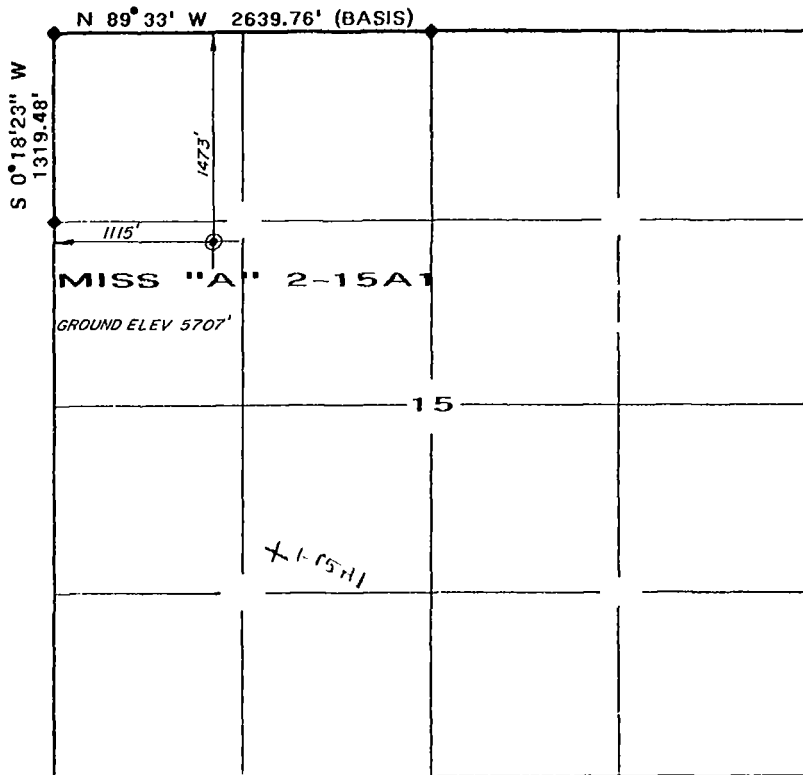
Approved by

Title

Conditions of approval, if any:

# BADGER OIL CORP. WELL LOCATION PLAT MISS "A" 2-15A1

LOCATED IN THE SW $\frac{1}{4}$  OF THE NW $\frac{1}{4}$  OF  
SECTION 15, T1S, R1W, U.S.B.&M.



SCALE: 1"=1000'

## LEGEND & NOTES

- ◆ Corner monuments found and used by this survey.

The General Land Office (G.L.O.) plat was used for reference and calculations, as was the U.S.G.S. map.

Reference points set as follows using the ground elevation at the well as the base:  
North @ 200'; Elev. 5708.1'  
South @ 200'; Elev. 5710.3'  
East @ 200'; Elev. 5697.7'  
West @ 200'; Elev. 5710.8'

## SURVEYOR'S CERTIFICATE

I hereby certify that this plat was prepared from field notes of an actual survey performed by me, during which the shown monuments were found or established

*Jerry D Allred*  
Jerry D Allred, Registered Land  
Surveyor, Cert No 3817 (Utah)

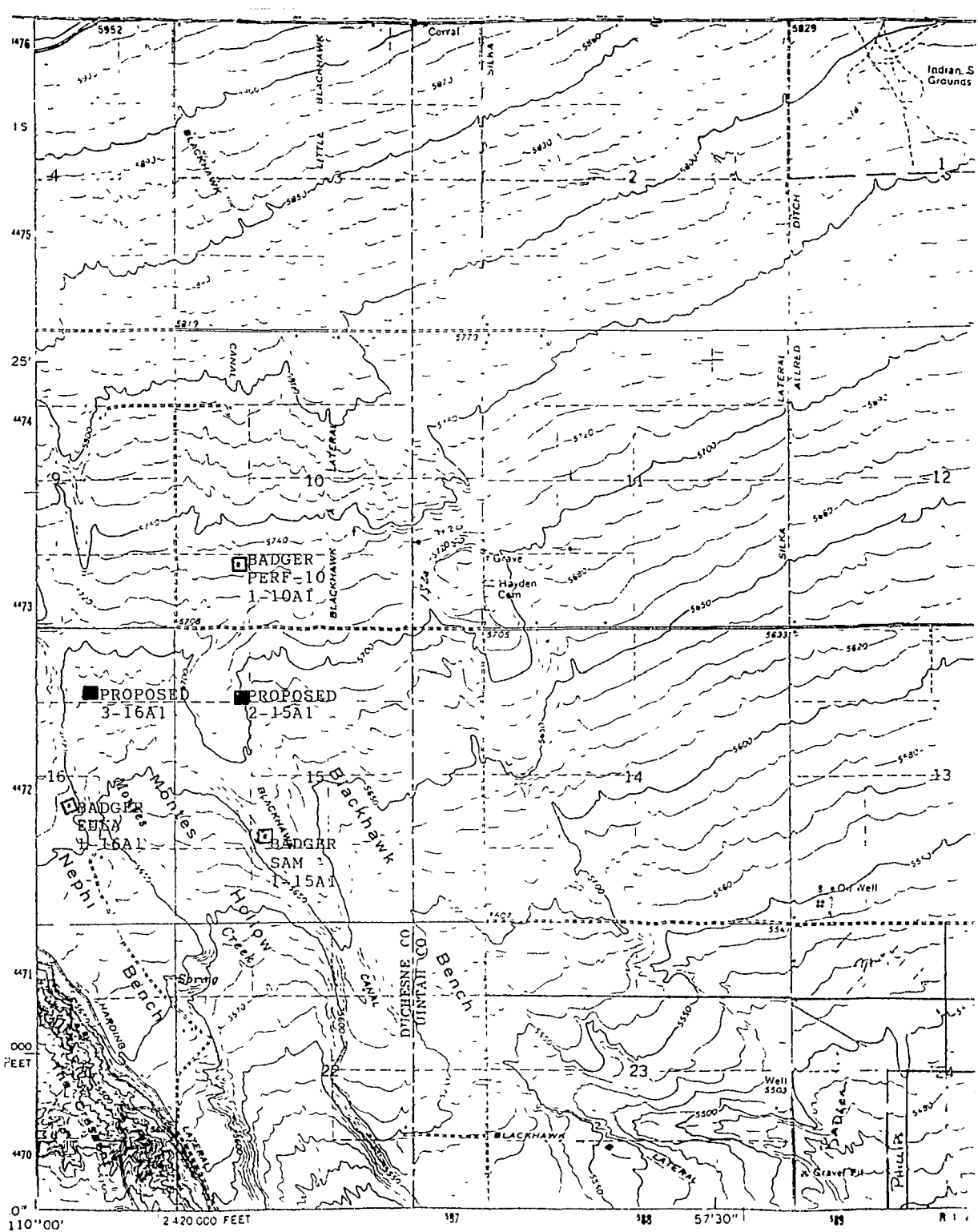


**JERRY D ALLRED & ASSOCIATES**  
Surveying & Engineering Consultants

121 North Center Street  
P.O. Drawer C  
DUCHESTER, UTAH 84021  
(801) 734-5352

27 Mar '92

83-122-005



# SURFACE REPORT

Section 15, Township 1 South, Range 1 West, U.S.M.

602-323-7953

CSCIL AND ANGELA  
CHIVERS, H/W, AND  
ROBERT L. CHIVERS  
J/T Neola, Utah

TRIBAL

B

MARK L. AND FERN B. OBERHANSLY, J/T  
Neola, Utah

State of Utah

ROBERT L. AND CAROL  
J. CHIVERS H/W J/T  
Neola, Utah

1520'



FLOYD AND HELEN  
WILKERSON, (Deed  
not of record)

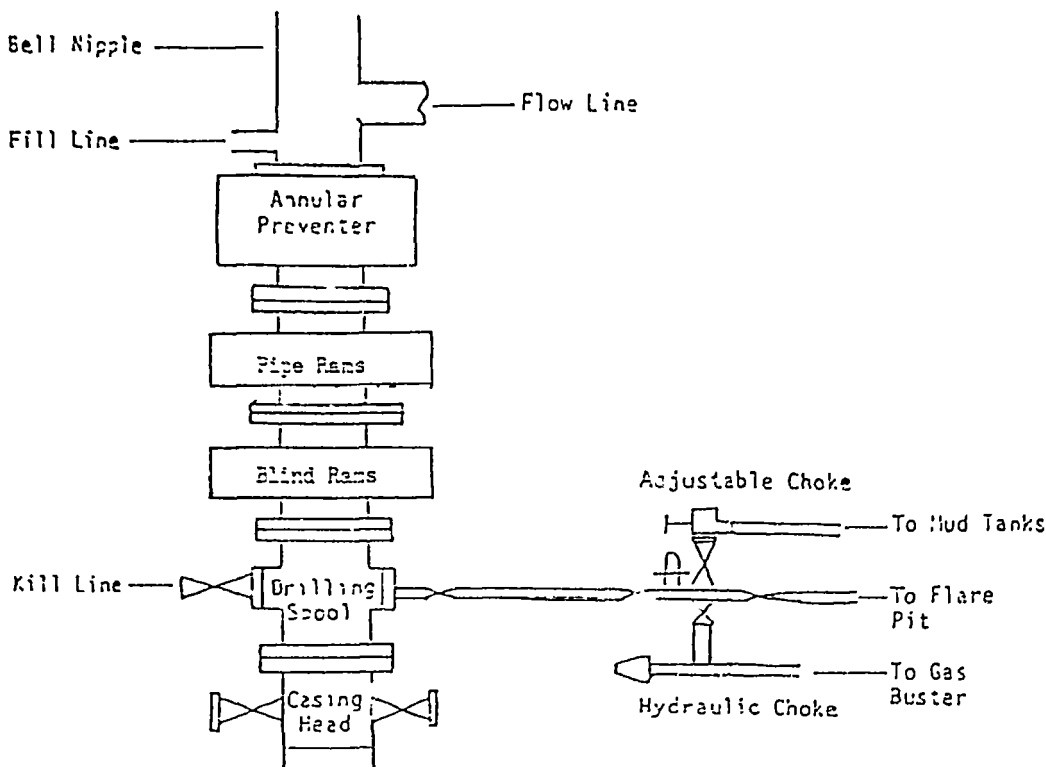
1520'

TRIBAL

HOWARD R. HORROCKS &  
ILA FAY HORROCKS, AS  
TRUSTEES OF HOWARD R  
HORROCKS FAMILY INTE  
VIVOS REVOCABLE TRUS  
DATED 1/11/79  
Neola, Utah

4 1/2

# BLOWOUT PREVENTION EQUIPMENT



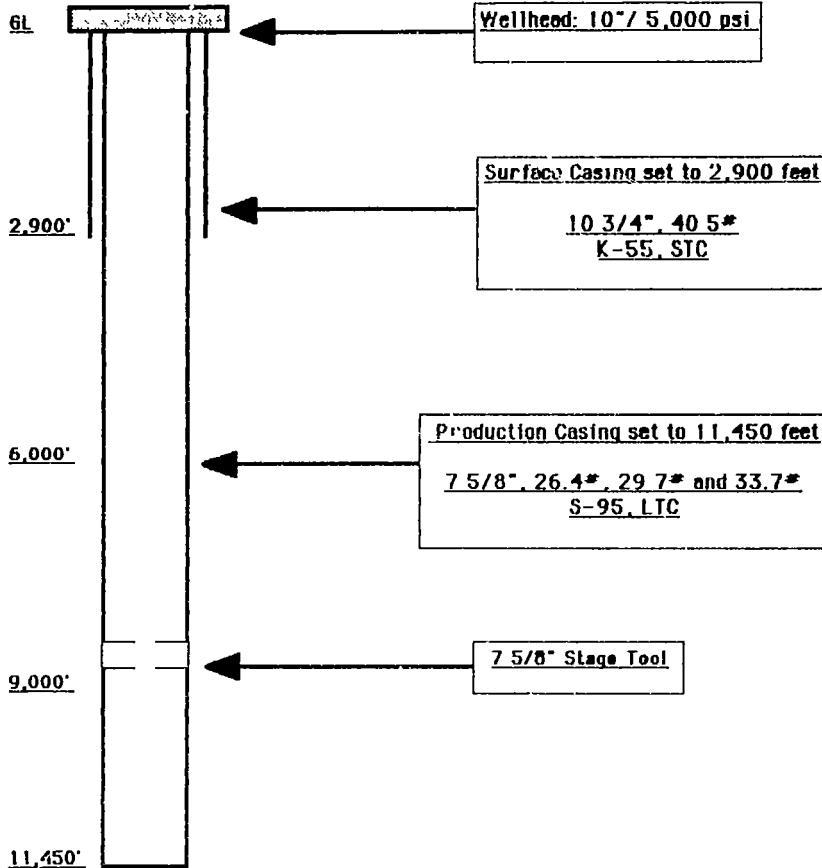
Minimum 3,000 PSI EOPE is to be installed after setting surface pipe. All preventers are to be tested to 1500 PSI prior to drilling out casing shoe.

Minimum 5,000 PSI EOPE is to be installed after setting the long string. The pipe rams and blind rams are to be tested to 5,000 PSI and the annular preventer to 1500 PSI prior to drilling out shoe.

All auxiliary EOPE will be tested to appropriate pressures when EOP's are tested. (Manifold, upper and lower Kelly cock, valves and inside EOP).

After drilling the shoe, the casing seat will be pressure tested to an equivalent mud weight of 13.5 ppg.

CASINO PROGRAM  
Miss "A" 2-15A1  
Sec 16, T1S, R1W  
Duchesne, Co Utah



Size	#/Ft Weight	Length	Internal Yield	Collapse	Joint Strength	String Weight
10 75	40 5	2,900	3,130	1,580	450,000	117,450
7 625	26 4	5,250	7,150	3,710	560,000	334,740
	29 7	3,200	8,180	5,120	659,000	
	33 7	3,000	9,380	7,260	772,000	



# **APPLIED DRILLING SERVICES, INC.**

## **OILFIELD CONSULTANTS AND OPERATIONS MANAGEMENT**

Route 3 Box 3010  
Roosevelt, Utah 84066  
801-722-5087

**APD  
BADGER OIL CORPORATION  
Miss "A" 2-15 A1  
SEC. 15 - T 1 S - R 1 W  
DUSCHESNE CO., UTAH**

1. OPERATOR  
Badger Oil Corporation  
PO Box 52745  
Lafayette, La 70505  
318-233-9200
2. OPERATOR'S UTAH AGENT  
Badger Oil Corporation  
c/o Robert Morlan  
Rt #3 Box 3011  
Roosevelt, Utah 84066  
801-722-2142
- 3 OPERATORS LOCAL CONTACT  
Cary Smith  
Applied Drilling Services  
Rt #3 Box 3010  
Roosevelt, Utah 84066  
801-722-5087
- 4 OPERATORS BOND  
Continental Casualty Company  
1982 - #7972555
- 5 LOCATION OF PROPOSED WELL  
Section 15 - Township 1 South - Range 1 West  
1,115' FWL, 1,473' FNL  
DUCHESNE Co, Utah  
SW 1/4 NW 1/4  
Eight miles NE of Roosevelt, Utah



6 PROPOSED OBJECTIVE

11,450' Lower Green River test

7 ELEVATION

5,707 GR

8. MUD PROGRAM

Low Solids Non-Dispersed

9 BOP DESIGN

Size	Series	Number
11"	5000*	Double Ram
11"	5000*	Annular

10 CASING PROGRAM

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/Ft</u>	<u>Setting Depth</u>	<u>Cement</u>
30 00"	20 000"	60**	150'	RM
13 50"	10 750"	40.5**	2,900'	900 sx Ø
9 75"	7 625"	26 4*, 29.7*, 33 7*	11,450'	495 sx Lite and H

11. PROJECTED TOPS

Uintah	2,250'
Green River	6,500'
Wasatch	11,500'

12 SURFACE OWNER

Robert Chivers

Surface damages are being negotiated and will be settled with the landowner prior to spud

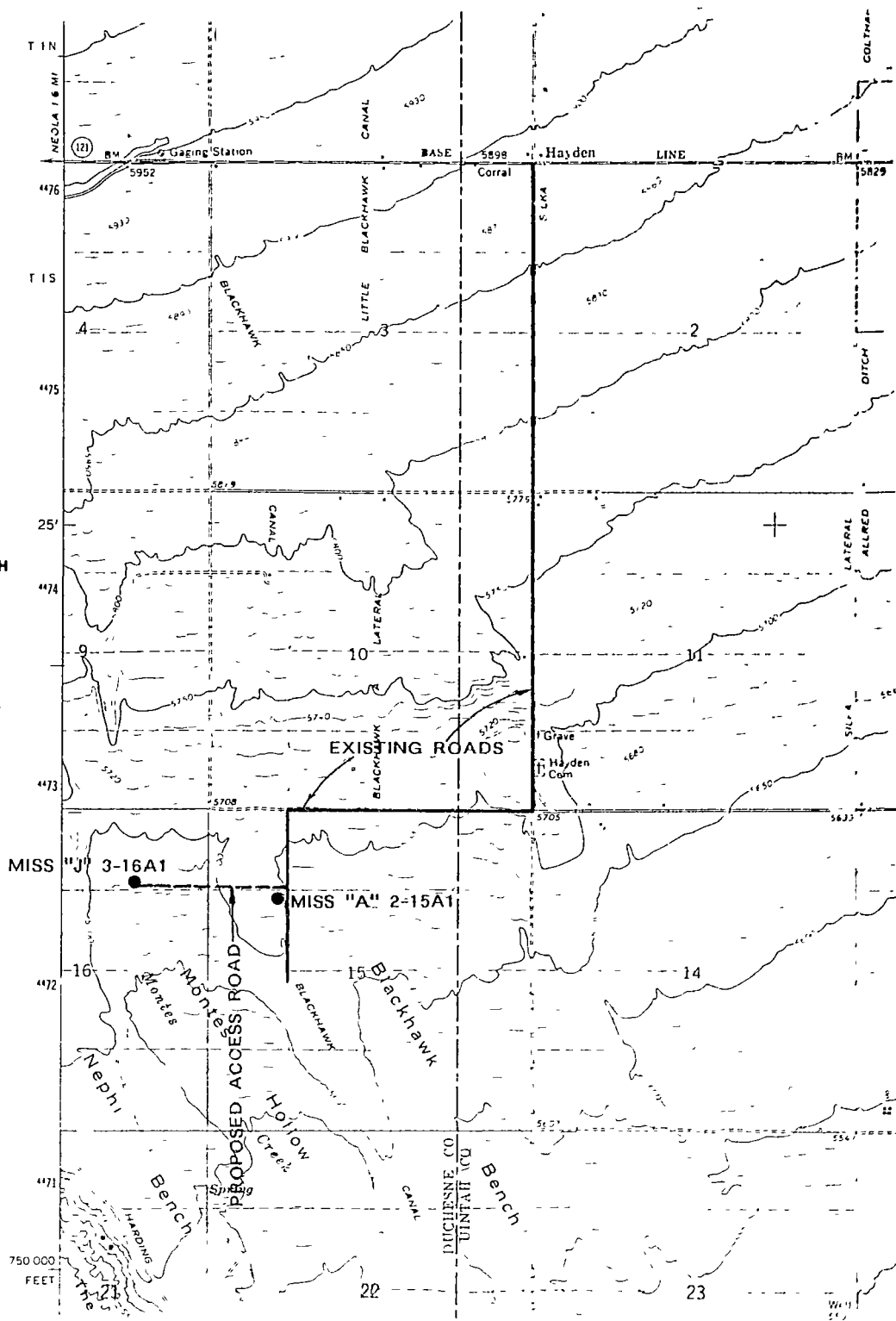
13 ELECTRIC LOGS

All logs will be furnished within prescribed time limits

Planned log suite includes DIL, SFL, FDC, CNL, Caliper

14 PROPOSED SPUD DATE

July 15, 1992





# APPLIED DRILLING SERVICES, INC.

## OILFIELD CONSULTANTS AND OPERATIONS MANAGEMENT

Rou J Box 3010  
Roosevelt, Utah 84066  
801-722-5087

April 24, 1992

RECEIVED

APR 27 1992

Mr Ronald J. Firth  
Associate Director Oil & Gas  
Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

DIVISION OF  
OIL GAS & MINING

Dear Mr Firth:

Enclosed please find our application to drill the Miss "J" well in Section 16 of T1S, R1W, USM and also the Miss "A" well in Section 15 of T1S, R1W, USM. These wells will be completed in the lower Green River formation

Pursuant to R615-3-3, we are requesting an administrative exception to the applicable Order of the Board in Cause No 139-42 for the location and siting of these wells. Specifically, based on geographical and engineering data we have enclosed in support of this request, we are of the opinion that production from the proposed wells will be from a producing formation that is separate and distinct from, and not in communication with the Wasatch formation underlying the units. We are therefore requesting that these wells not be considered as one of the two allowable producing wells in the unit for production from the Wasatch formation under Cause No 139-42

We propose these wells to be designated as Green River Formation wells and the total depth of these wells shall be a point identified by the following

To that interval which extends for 2,100 feet below the stratigraphic equivalent of the 9,418 foot depth (Tgr 3 marker) in the gamma ray log of the Badger 1-15A1 Badger Sam well located in the Northeast 1/4 of the Southwest 1/4 of Section 15, T1S, R1W, Ute Special Meridian

Enclosed with this application is a letter and supporting log correlations from Mr William Zagorski, Manager of Geology for Mark Resources Corporation. This represents the position of Badger Oil Corporation and its Partners concerning our request for a variance

Mr. Ronald J. Firth  
Page 2  
April 24, 1991

Also enclosed is geological data and supporting information from Mr. John C. Osmond, Consulting Geologist

Pursuant to the State APD.

1. Surface damage and access agreements will be obtained from the land owners prior to breaking ground for locations and spudding of these wells.

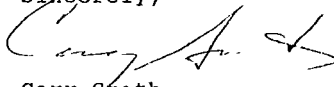
2. Water use agreements are being negotiated with the Ute Indian Tribe, all proper Temporary Division forms will be filed with the State, prior to spud.

3. All fresh water zones encountered will be repaired as per state regulations

Would you please address all correspondence concerning this matter to this office.

Thank you for your help. Please feel free to call should we need to answer any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cary Smith', with a stylized flourish at the end.

Cary Smith  
Agent for Badger Oil Corporation

CS/vmr

Enclosures



## MARK RESOURCES CORPORATION

Penn Center West / Building II, Suite 224 / Pittsburgh, PA 15276  
Phone 412-788-1340 / FAX 412-788-1345  
Toll Free 1-800 229-1345

April 23, 1992

RECEIVED

APR 27 1992

Mr. Ron Firth  
Associate Director Oil & Gas  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203

DIVISION OF  
OIL GAS & MINING

Dear Ron:

As Cary Smith and I discussed with you, Badger Oil Corporation and a number of its working interest partners are interested in drilling new wells in Duchesne and Uintah Counties to develop oil from the Lower Green River Formation. The attached location map depicts the area of interest together with available flow test and cumulative production data for the offsetting wells. Presently, there is one producing Wasatch well per section. Under current spacing orders, one additional Wasatch well may be drilled on each 640-acre section. Our present interest is to drill only to the Lower Green River or Green River-Wasatch Transition Zone (est. 11,200 - 11,400 feet) to complete that interval. Our concern is that, under current spacing laws, drilling only to the Transition Zone will prohibit our ability to develop additional Wasatch reserves since the proposed Lower Green River wells will penetrate well below the Tgr3 marker. Under the present spacing order, there is a strong incentive against developing the Green River Formation since it may prohibit further Wasatch drilling. Also, most of the existing Wasatch wells have good behind-pipe potential in the Green River, but economic Wasatch production can be maintained via recompletion for 15 years or more. This is another factor in delaying development of potentially-significant oil reserves from the Green River Formation.

It would be more advantageous from our position to have the ability to drill two Wasatch interval wells per section and two Green River interval wells per section. We feel that the acreage block has significant untapped oil reserves from the Green River Formation and probably will represent extensions of the historic Roosevelt and Bluebell Fields, both productive from the Green River Formation.

I have enclosed two cross sections I prepared for the area which run essentially north-south to west-east. Significant shows include zones at 11,600 feet (Perfect "10" well), 11,270 feet

Mr. Ron Firth  
April 23, 1992

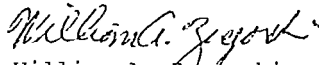
Page Two

(Badger Sam H. U. Mungus well), 11,150 feet to 11,180 feet (Fred Basset well), and at 11,050 feet in the Bradley Fee well. We feel that development drilling is merited in the interval between the Tgr3 marker and the deeper pay zones described above and included on the attached cross sections.

I hope the enclosed information is useful in clarifying our concern about Green River development drilling in the Bluebell-Altamont Field. If you need additional information or have any questions, please give me a call at 412-788-1340.

Sincerely,

MARK RESOURCES CORPORATION

  
William A. Zagorski  
Manager of Geology

WAZ/blr

Enclosures

C#2WAZ/FIRTH

JOHN C OSMOND  
CONSULTING GEOLOGIST  
FIRST INTERSTATE TOWER  
621 SEVENTEENTH ST STE 2110  
DENVER COLORADO 80293

(303) 292 5259

April 24, 1992

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APR 27 1992

DIVISION OF  
OIL, GAS & MINING

Mr. Cary Smith  
Badger Oil Corporation  
Route 3, Box 3010  
Roosevelt, Utah 84066

RE: Geologic definitions of the two producing zones under Badger leases in T. 1 S., R. 1 W., USM, for inclusion in your APD.

Dear Cary:

As you pointed out, under the Badger leases in T. 1 S., R. 1 W., USM, the stratigraphic interval covered by Utah Board of Oil, Gas and Mining Order 139-42 consists of two separate producing zones. In this letter I refer to these as the "upper producing zone" and the "lower producing zone."

I suggest defining the stratigraphic interval of the "upper producing zone", for the reasons discussed below, as follows: "That interval which extends for 2,100 feet below the stratigraphic equivalent of the 9,418-foot depth (Tgr3 Marker) in the gamma ray log of the Badger 1-15A1 Badger Sam well located in the northeast 1/4 of the southwest 1/4 of Section 15, T. 1 S., R. 1 W., Ute Special Meridian."

This definition includes all of the shows in the "upper producing zone" that are recorded on the mud logs of the 6 existing Badger wells. Also, it defines the proposed depths of the subsequent "upper producing zone" wells as the depth calculated by adding 2,100 feet to the depth of the Tgr3 Marker, from the accompanying structure map, and adding the total to the kelly bushing elevations of the wells. Furthermore, it defines the "lower producing zone" as extending from 2,100 feet below the Tgr3 Marker to the base of the Wasatch Formation.

Enclosed are 5 copies of 4 cross sections showing all of the data I have been able to obtain that is pertinent to identifying and defining the "upper producing zone." Three of the cross sections tie the Badger wells, in east-west lines, with wells in adjacent sections to the east and west. One section ties the Badger wells in a north-south line, with wells in adjacent sections to north and south. These cross sections incorporate all of the Badger wells on the lands for which the application applies.

The following discussion summarizes the facts I considered in formulating the definitions of the two producing zones.

In the subject area there are two separate producing zones within the interval addressed by Order 139-42. The shallower zone is known, by the operators, as the "Lower Green River" producing zone although it includes production from rocks within the Upper Wasatch Formation (see operators' Top of Wasatch on the cross sections). The deeper producing zone is called, by the operators, the "Wasatch" producing zone. Because these two zones do not correspond exactly to the stratigraphic formations, I have referred to them as the "upper producing zone" and the "lower producing zone," respectively.

The subsurface attitude of the producing zones is controlled by the lithology of the stratigraphic units; and therefore they are approximately parallel to the strata, which dip northwest as shown on the accompanying structure map. The ground surface rises northward at an independent rate unrelated to the dip of the beds.

I believe that the best basis for defining the "upper producing zone" is to refer it to the Tgr3 Marker which can be identified on the gamma ray logs of wells throughout a large part of the Altamont-Bluebell field and is used in Order 139-42. There is no similar marker horizon corresponding to the base of the "upper producing zone," but the zone has a relatively uniform thickness (2,100 feet) under the six sections of Badger leases. Therefore, the most easily recognized and most useful definition of the top, bottom and thickness of the "upper producing zone" is made by tying them to the Tgr3 Marker.

Order 139-42 permitted the drilling of up to two wells, producing from the Lower Green River Formation (below the Tgr3 Marker) to the base of the Wasatch Formation, per 640-acre spacing unit. In the area of the Badger leases in T. 1 S., R. 1 W., USM, there are two separate producing zones within the overall Lower Green River Formation and Wasatch Formation interval. The "upper producing zone" includes (1) strata in the Lower Green River Formation (lacustrine beds, some of which, such as the Tgr3 Marker, can be correlated from well to well over large areas); (2) strata in the "transition zone" in which Green River lacustrine rocks are interbedded with Wasatch fluvial and alluvial redbeds; and (3) the upper part of the main body of the Wasatch Formation.

The main body of the Wasatch Formation consists of fluvial and alluvial red shales, siltstone and sandstones. These beds are discontinuous laterally and do not create distinctive curves on gamma ray or other logs that can be correlated between wells. The "upper producing zone" includes reservoirs in the upper part of the main body of the Wasatch Formation.

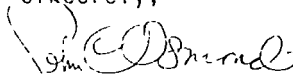


The lower part of the main body of the Wasatch Formation grades downward into the "Lower Lake Beds"/Flagstaff Member of the Wasatch Formation. These strata contain the reservoirs of the "lower producing zone" and beds such as the Neola Three Fingers Limestone which can be correlated between wells over a large area.

The "upper producing zone" has lower reservoir pressure than the "lower producing zone" and typically produces black oil in contrast to dark green oil produced from the "lower producing zone." The non-productive stratigraphic interval between the "upper producing zone" and the "lower producing zone" is 800 feet to 1,000 feet thick in the main body of the Wasatch Formation. There is no communication between the two zones under the Badger leases.

If I can be of further assistance in this matter, please call on me.

Sincerely,



John C. Osmond

File:BADGER2

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. FEE/FEE
2. NAME OF OPERATOR Badger Oil Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR C/O Applied Drilling Services, Inc. Rt. 3 Box 3010 Roosevelt, Utah 84066		7. UNIT AGREEMENT NAME 14-20-1162-3860
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1,473' FNL 1,115' FWL NW 1/4 NW 1/4 SW		8. PAIN OR LEASE NAME M.L. "A"
14. PERMIT NO.		9. WELL NO. 2-15A1
15. ELEVATIONS (Show whether OF, RT, OR, etc.)		10. FIELD AND POOL, OR WILDCAT Bluebell
		11. SEC., T., R., M., OR S.E., AND SURVEY OR AREA Section 15, T1S, R1W
		12. COUNTY OR PARISH 13. STATE Duchesne Utah

16.

**Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directional, drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work).\*

Badger Oil Corporation hereby amends its Application for Permit to Drill to the above referenced well. In accordance with the Order in Cause #139-42, this will be the second well drilled in subject Section 15. All documentation previously submitted for this well are incorporated herein by this reference.

**RECEIVED**

JUN 16 1992

DIVISION OF  
OIL GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

DATE

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CERTIFY OF APPROVAL IF ANY.

## DRILLING LOCATION ASSESSMENT

### **State of Utah Division of Oil, Gas and Mining**

OPERATOR: BADGER OIL CORPORATION WELL NAME: MISS "A" 2-15A1  
SECTION: 15 TWP: 1S RNG: 1W LOC: 1473 FNL 1116 FWL  
QTR/QTR/NE/NW COUNTY: DUCHESNE FIELD: BLUEBELL  
SURFACE OWNER: ROBERT CHIVERS  
SPACING: 660 F SECTION LINE 1320 F ANOTHER WELL  
GEOLOGIST: BRAD HILL DATE AND TIME: 6/18/92 11:00

PARTICIPANTS: Cary Smith-Badger Oil

REGIONAL SETTING/TOPOGRAPHY: The proposed location is in the central Uinta Basin and is located on a topographically high area on an outwash terrace. The pad will be located on a fairly flat area with a very gentle slope to the NE.

#### LAND USE:

CURRENT SURFACE USE: Domestic grazing.

PROPOSED SURFACE DISTURBANCE: A square pad will be constructed with dimensions of 400'X 400' including a 200'X 120' reserve pit. An access road approximately .5 miles long will also be constructed.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Pasture grass, Rushes, Russian Olive, Rabbitbrush/Birds, Insects, No cattle at present but there is evidence of recent grazing.

#### ENVIRONMENTAL PARAMETERS

##### SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Sandy-silt with abundant cobbles.

SURFACE FORMATION & CHARACTERISTICS: Quaternary alluvium.

EROSION/SEDIMENTATION/STABILITY: No active erosion or sedimentation at present. The location should be stable.

PALEONTOLOGICAL POTENTIAL: None observed.

##### SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: Uintah-2250', Green River-6500', Wasatch-11,500'

ABNORMAL PRESSURES-HIGH AND LOW: None anticipated

CULTURAL RESOURCES/ARCHAEOLOGY: NA

CONSTRUCTION MATERIALS: Onsite materials will be used for construction.

SITE RECLAMATION: As per landowner instructions.

RESERVE PIT

CHARACTERISTICS: A rectangular reserve pit will be constructed with dimensions of approximately 200'X 120'X 8'.

LINING: A synthetic liner of 12 mil minimum thickness will be required for this location.

MUD PROGRAM: Fresh water LSND mud will be used from surface casing to TD.

DRILLING WATER SUPPLY: Water will be obtained from the Blackhawk Lateral.

STIPULATIONS FOR APD APPROVAL

The reserve pit is to be lined with a synthetic liner.

## Evaluation Ranking Criteria and Ranking Score

Site-Specific Factors	Panking Score	Final Ranking Score
Distance to Groundwater >200' 100 to 200' 75 to 100' 25 to 75' <25' or recharge area	0 5 10 15 20	(PROB. NEAR SURFACE WATER PRESENT. ABNDT-RUSHES) 20
Distance to surface Water >1000' 300 to 1000' <300'	0 2 5	0
Distance to Nearest Municipal Well >5280' 1320 to 5280' 500 to 1320' <500'	0 5 10 20	0
Distance to Other Wells >1320' 300 to 1320' <300'	0 10 20	0
Native Soil Type: Low permeability Mod. permeability High permeability	0 10 20	20

Drilling Fluids		
Air/mist	0	5
Fresh Water	5	
5000< TDS <10000	10	
TDS > 10000	15	
Oil Based Mud or mud containing hazardous constituents	20	
Drill Cuttings		
Normal Rock	0	0
Salt or detrimental	10	
Annual Precipitation		
<10	0	5
10 to 20	5	
>20	10	
Affected Populations		
<100	0	0
100 to 300	10	
>3000	20	
Presence of Nearby Utility Conduits		
Not Present	0	0
Unknown	5	
Present	15	

Final Score	50
-------------	----

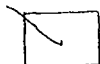
LINE PIT

OPERATOR B. L. Oil Corp. J-17 DATE 6-23-90  
WELL NAME Miss. 'A' W-15A1  
EC SW 15 T 15 R 1W COUNTY Duchess

43-013-31360  
API NUMBER

tu (4)  
TYPE OF LEASE

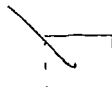
CHECK OFF



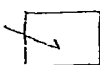
PLAT



BOND  
7970555  
in full



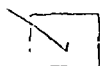
NEAREST  
WELL



LEASE



FIELD  
USBM



POTASH OR  
OIL SHALE

PROCESSING COMMENTS:

One additional producing well within Sec. 15.  
Water Permit  
Permit to 14 gpm/100 gpm minimum to 20 gpm

APPROVAL LETTER

SPACING:



R615-2-3

N/A  
UNIT



R515-3-2



134 to 4-17-85  
CAUSE NO & DATE



R615-3-3

STIPULATIONS:

the stipulation  
Water Permit  
3 Reserve pit is to be lined with a synthetic liner,  
of 12 mil minimum thickness.



Norman H. Bangerter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Trade Center Suite 350  
Salt Lake City Utah 84103 1203  
801 536 5340

June 23, 1992

Badger Oil Corporation  
c/o Applied Drilling Services, Inc  
Rt. 3 Box 3010  
Roosevelt, Utah 84066

Gentlemen

Re Miss "A" 2-15A1 Well, 1473 feet from the north line, 1115 feet from the west line,  
SW 1/4 NW 1/4, Section 15, Township 1 South, Range 1 West, Duchesne County,  
Utah

Pursuant to Utah Code Ann § 40-6-6, (1953, as amended) and the order issued by the Board of Oil, Gas and Mining in Cause No 139-42 dated April 17, 1985, approval to drill the referenced well is hereby granted

In addition, the following specific actions are necessary to fully comply with this approval

- 1 Badger Oil Corporation, as designated operator, is the bonded principal in reference to this Application for Permit to Drill. Should this designation change or a transfer of ownership occur, liability will remain with the designated operator until the Division is notified by letter of a new bonded principal
- 2 Submittal to the Division of evidence providing assurance of an adequate and approved supply of water as required by Utah Code Ann § 73-3, Appropriations, prior to commencing drilling operations
- 3 Reserve pit is to be lined with a synthetic liner of 12 mil minimum thickness.
- 4 Compliance with the requirements of Utah Admin R 649-1 et seq, Oil and Gas Conservation General Rules
- 5 Notification within 24 hours after drilling operations commence



6. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change
7. Submittal of the Report of Water Encountered During Drilling, Form 7.
8. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R.J. Firth, Associate Director, (Home) (801)571-6068
9. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-013-31360.

Sincerely,



R.J. Firth  
Associate Director, Oil and Gas

ldc  
Enclosures  
cc Bureau of Land Management  
J.L. Thompson  
WO11



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Trade Center, Suite 350  
Salt Lake City, Utah 84103 1203  
801 538 5340  
801 359 3940 (Fax)  
801 538 5319 (TDD)

February 14, 1994

Badger Oil Corporation  
c/o Applied Drilling Services, Inc.  
Rt. 3 Box 3010  
Roosevelt, Utah 84066

Re: Application for Permit to Drill  
Well No. Miss "A" 2-15A1  
SWNW, Sec. 15, T. 1S, R. 1W  
Duchesne County, Utah  
API No. 43-013-31360

Dear Sirs

Your referenced application submitted for approval was approved January 31, 1990. In accordance with R 649-3-4-4, the Division rescinds its approval of the referenced application.

In order to drill this well in the future, a new application will have to be submitted.

Yours truly,

A handwritten signature in cursive script that reads "Frank Matthews".

Frank Matthews  
Petroleum Engineer

cc R J Firth  
State Lands and Forestry  
Well file